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(54) POLYIMIDE FILM FOR HARD DISK SUSPENSION WIRING BASE MATERIAL

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent moisture absorption in air or in working process and to suppress the occurrence of warping or curling of a substrate by setting the modulus of elasticity and absorption coefficient of a polyimide film as a base material for hard disk suspension wiring to particular values.

SOLUTION: Modulus of elasticity of polyimide film is set higher than or equal to 500 kg/mm² and its absorption coefficient to lower than or equal to 2.0%, and it is desirable to set the modulus of elasticity from 500 to 3000 kg/mm² and its absorption coefficient from 0% to 1.6%. Moreover, the coefficient of thermal expansion is not less than -10 but not more than 25 ppm, preferably not more than 20 ppm, more preferably not more than 17 ppm. The coefficient of humidity expansion is not less than 0 but not more than 15 ppm, preferably not less than 12 ppm, and the elongation percentage is from 20% to 500%, preferably not less than 30%. Also, the thickness of film is not more than 50 µm, desirably not more than 25 µm, and more desirably from 2 to 15 µm. By doing this, modulus of elasticity increases even though the film is thin which facilitates film handling.

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